UTILITY PATENT APPLICATION **TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

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Attorney Docket No.		10354*3			
First Inventor		John R. Humphrey			
Title	ORGANIZATION OF CACHE MEMORY FOR HARDWARE ACCELERATION OF THE FINITE-DIFFERENCE TIME-DOMAIN METHOD				
5					

APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patient application contents. ADDRESS TO. Commissions for Patients P.O. Box 1450 ADDRESS TO. Commissions for Patients P.O. Box 1450 Alexandria, Va 22313-1450 To a Computer Program Application for processing) 2. X See 37 CFR 127. 3. X Specification or Trial Pages 17 1 Total Pages 17 1 Total Pages 17 1 Denote a Program of the first postulation of the behavior of the process of the p		Express Mail Label No. ER 863440062 US					
Computer Program (Appendix)		ntents. ADDRESS TO: Commissioner for Patents P.O. Box 1450					
a. X Newly executed (original or copy) (unexecuted) b. Copy from a prior application (37 CFR 1.63(d)) i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 13. Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 14. X Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 15. Certified Copy of Priority Document(s) (if foreign priority sclaimed) 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 17. Other: 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No.: Prior application information: Examiner Art Unit: For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an eath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The Incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS X Customer Number: 23416 OR Correspondence address below Rame Address City State Zip Code Country Fax Name (Prior/Type) James M. Olsen Registration No. (Attomey/Agent) 40,408	Submit an original, and a duplicate for fee processing) Applicant claims small entity status.	Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. Computer Readable Form (CRF) b. Specification Sequence Listing on: i. CD-ROM or CD-R (2 copies); or ii. Paper c. Statements verifying identity of above copies ACCOMPANYING APPLICATION PARTS 9. Assignment Papers (cover sheet & document(s)) 10. 37 CFR 3.73(b) Statement Power of (when there is an assignee) English Translation Document (if applicable)					
specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No.: Prior application information: Examiner Art Unit: For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The Incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS X Customer Number: 23416 OR Correspondence address below Name Address City State Zip Code Country Telephone Fax Name (Print/Type) James M. Olsen Registration No. (Attomey/Agent) 40,408	a. X Newly executed (original or copy) (unexecuted) b. Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed) i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).	Statement (IDS)/PTO-1449 Citations 13. Preliminary Amendment 14. X Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 15. Certified Copy of Priority Document(s) (if foreign priority is claimed) 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.					
Name Address City State Zip Code Country Telephone Fax Name (Print/Type) James M. Olsen Registration No. (Attorney/Agent) 40,408	specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No.: Prior application information: Examiner Art Unit: For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.						
Address City State Zip Code Country Telephone Fax Name (Print/Type) James M. Olsen Registration No. (Attorney/Agent) 40,408		OR Correspondence address below					
Country Telephone Fax Name (Print/Type) James M. Olsen Registration No. (Attorney/Agent) 40,408	Address	to Zin Codo					
Name (Print/Type) James M. Olsen Registration No. (Attorney/Agent) 40,408	·						
	Country	ephone Fax					

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PTO/SB/17 (10-03)
Approved for use through 7/31/2006. OMB 0651-0032
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Under the Paperwork Reduction Act of 1995, no persons are requi	rea to re	spond t	o a colk	ection of		uoi number.	
FEE TRANSMITTAL					Complete if Known		
ILL INAMOMIITAL	Application Number		Numbe		Not Yet Assigned		
for FY 2004	Filing Date			March 24, 2004	March 24, 2004		
		First I	lamed	Inven	ntor John R. Humphrey		
Effective 10/01/2003, Patent fees are subject to annual revision.	Examiner Name			ame	Not Yet Assigned	Not Yet Assigned	
X Applicant claims small entity status. See 37 CFR 1.27	Art Unit				N/A	N/A	
TOTAL AMOUNT OF PAYMENT (\$) 428.00		Attom	ey Doo	ket No	o. 10354*3	10354*3	
METHOD OF PAYMENT (check all that apply)				FEE	CALCULATION (continued)		
X Check Credit Money Order Other None	3. ADDITIONAL FEES						
Deposit Account:							
Deposit	Large Entity Small Entity						
Account 03-2775 Number	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid	
Deposit Account Connolly Bove Lodge & Hutz LLP	1051	130	2051	65	Surcharge - late filing fee or oath		
Name The Director is authorized to: (check all that apply)	1052	50	2052	25	Surcharge – late provisional filing fee or cover sheet.		
Charge fee(s) indicated below X Credit any overpayments	1053	130	1053	130			
					Non-English specification		
X Charge any additional fee(s) or any underpayment of fee(s)	1812	2,520	1812		For filing a request for ex parte reexamination Requesting publication of SIR prior to		
Charge fee(s) indicated below, except for the filing fee	1804	920*	1804	920	Examiner action		
to the above-identified deposit account.	1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action		
FEE CALCULATION	1251	110	2251	55	Extension for reply within first month		
1. BASIC FILING FEE	1252	420	2252	210	Extension for reply within second month		
Large Entity Small Entity	1253	950	2253	475	Extension for reply within third month		
Fee Fee Fee Fee Fee Paid Code (\$) Code (\$)	1254	1,480	2254	740	Extension for reply within fourth month		
1001 770 2001 385 Utility filing fee 385.00	1255	2,010	2255	1,005	Extension for reply within fifth month		
1002 340 2002 170 Design filing fee	1401	330	2401	165	Notice of Appeal		
1003 530 2003 265 Plant filing fee	1402	330	2402	165	Filing a brief in support of an appeal		
1004 770 2004 385 Reissue filing fee	1403	290	2403	145	Request for oral hearing		
1005 160 2005 80 Provisional filing fee	1451	1,510	1451		Petition to institute a public use proceeding		
SUBTOTAL (1) (\$) 385.00	1452	110	2452		Petition to revive – unavoidable		
2. EVERA OLAMA ESCO FOR LITHEN AND RELOCUE	1453 1501	1,330 1,330	2453 2501		Petition to revive - unintentional		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Extra Fee from	1502	480	2502		Utility issue fee (or reissue) Design issue fee		
Total Claims 16 -20** = x = 0.00	1503	640	2503		Plant issue fee		
Independent 4 33** = 1 x 43.00 = 43.00	1460	130	1460		Petitions to the Commissioner	——[
Claims 43.00 43.00 Multiple Dependent =	1807	50	1807		Processing fee under 37 CFR 1.17(q)		
	1806	180	1806		Submission of Information Disclosure Stmt		
Large Entity Small Entity Fee Fee Fee Fee Fee Fee Description Fee Description	8021	40	8021		Recording each patent assignment per		
cone (a) cone (a)					property (times number of properties) Filing a submission after final rejection		
1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3	1809	770	2809	363	(37 CFR 1.129(a))		
1203 290 2203 145 Multiple dependent claim, if not paid	1810	770	2810		For each additional invention to be examined (37CFR 1.129(b))		
1204 86 2204 43 ** Reissue independent claims	1801	770	2801		Request for Continued Examination (RCE)		
over original patent 1205 18 2205 9 ** Reissue claims in excess of 20	1802	900	1802		Request for expedited examination of a design application		
and over original patent	Other f	ı ee (spec	ify)		or a adaign application		
SUBTOTAL (2) (5) 43.00		ced by E		ing Fee	Paid SUBTOTAL (3) (\$)	0.00	
**or number previously paid, if greater; For Reissues, see above					(4)		
SUBMITTED BY				(Complete (if applicable))			
Name (Print/Type) James M. Olsen		ation No	40.	408	Telephone (302) 658-9141		
Signature	CHICKLE	yr-yaril)			Date March 24, 2004		
Signature James 11. Ulsin					IVIAICII 24, 2004		
/1							

Express Mail Label No. ER 863440062 US	Dated: March 24, 2004	

Application No. ((if known)	ı
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Attorney Docket No.: 10354*3

Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. ER 863440062 US in an envelope addressed to:

> Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

March 24, 2004 Date

James M. Olsen

ed or printed name of person signing Certificate

Note:

Each paper must have its own certificate of mailing, or this certificate must identify

each submitted paper.

Postcard

Check for \$428.00 **Application Data Sheet**

Utility Patent Appliction Transmittal

Fee Transmittal Specification **Drawings**

Combined Declaration and Power of Attorney (unexecuted)